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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,541	12/12/2003	Kenji Shiraishi	1536	9699

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EXAMINER

PHAM, MINH CHAU THI

ART UNIT PAPER NUMBER

1724

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/734,541

Applicant(s)

SHIRAISHI ET AL.

Examiner

Minh-Chau T. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-11, 13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11 and 13-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4, 6-11 and 13-22 are again rejected under 35 U.S.C. 102(b) as being anticipated by Seibert et al (4,231,768).

Seibert et al teach a gas filter for removing oil mist from a gas comprising a cylindrical case (15) and a filter element (7) provided inside the cylindrical case (15), an inlet (5), an outlet (29) (see details of Fig. 3, col. 6, lines 34-42) wherein the air stream coming from the gas inlet (15) through the inside hollow (6) of the filter (7) then flowing out through the filtration layers (see Fig. 3), wherein the first filtration (CO) having glass fibers (col. 6, lines 50-55) and the second filtration (ST) having synthetic or natural fibrous materials (col. 7, line 54 through col. 8, line 10, col. 8, lines 45-55, col. 9, lines 27-50) or outer sheath (col. 9, lines 63-68), and these filtration layers can remove particles as small as 0.1 microns (col. 9, lines 26-39).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seibert et al (4,231,768).

Seibert et al disclose a gas filter for removing oil mist from a gas comprising a cylindrical case (15) and a filter element (7) provided inside the cylindrical case (15), an inlet (5), an outlet (29) (see details of Fig. 3, col. 6, lines 34-42) wherein the air stream coming from the gas inlet (15) through the inside hollow (6) of the filter (7) then flowing out through the filtration layers (see Fig. 3), wherein the first filtration (CO) having glass fibers (col. 6, lines 50-55) and the second filtration (ST) having synthetic or natural fibrous materials (col. 7, line 54 through col. 8, line 10, col. 8, lines 45-55, col. 9, lines 27-50) or outer sheath (col. 9, lines 63-68), and these filtration layers can remove particles as small as 0.1 microns (col. 9, lines 26-39).

Claim 23 differs from the disclosure of Seibert et al in that it only calls for only two filtration materials being the first filtration material made of glass paper and a second filtration material made of non-woven fabric in intimate contact with the first filtration material. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide only two filtration layers instead of four as disclosed by Seibert et al since it has been held that omission of an element and its

function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. See re Karlson, 136 USPQ 184.

As to the numerical pore diameter requirements, i.e. "5 to 20 microns" and "55 microns" of claim 24, the specification contains no disclosure of either the critical nature of these requirements or any unexpected results arising therefrom, and as such these requirements would be arbitrary and therefore obvious. Applicants **must** show that these requirements are critical. See In re Woodruff, 16 USPQ 2d 1934.

### ***Response to Amendment***

Applicant's arguments filed on September 6, 2006 have been fully considered but they are not persuasive.

Applicant argues that the cited primary reference Knight et al disclose "the porous plastic sock or sheath which the tubular boro-silicate glass micro-fiber filter (7) is within, is simply a container to hold the micro-fiber filter (7) while permitting gas to escape therethrough and is not a non-woven fabric. The other filter element (9) is made of sintered bronze or porous plastic material, neither of which can be properly considered to be a non-woven fabric". The Examiner now drops the Knight et al reference.

Applicant further argues the cited primary reference "Seibert et al disclose at least 4 layers of material in contrast to the claimed filter requires only two filtration material, respectively, of glass paper and non-woven fabric". The Examiner respectfully disagrees. Seibert et al clearly teach a gas filter for removing oil mist from a gas comprising a cylindrical case (15) and a filter element (7) provided inside the cylindrical

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case (15), an inlet (5), an outlet (29) (see details of Fig. 3, col. 6, lines 34-42) wherein the air stream coming from the gas inlet (15) through the inside hollow (6) of the filter (7) then flowing out through the filtration layers (see Fig. 3), wherein the first filtration (CO) having glass fibers (col. 6, lines 50-55) and the second filtration (ST) having synthetic or natural fibrous materials (col. 7, line 54 through col. 8, line 10, col. 8, lines 45-55, col. 9, lines 27-50) or outer sheath (col. 9, lines 63-68), and these filtration layers can remove particles as small as 0.1 microns (col. 9, lines 26-39). It is clearly shown in Figure 3 that the glass fiber filtration material layer (CO) is in intimate contact with the non-woven fabric filtration material layer (SP). The claims differ from the disclosure of Seibert et al in that it only calls for only two filtration materials (instead of four layers as disclosed by Seibert et al) being the first filtration material made of glass paper and a second filtration material made of non-woven fabric in intimate contact with the first filtration material. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide only two filtration layers instead of four as disclosed by Seibert et al since it has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. See re Karlson, 136 USPQ 184.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**Minh-Chau Pham**  
**Patent Examiner**  
**Art Unit : 1724**  
**November 6, 2006**